

Stocking, F. Lasher.....	271,838
Stocking and method of making the same, R. W. Scott.....	271,526
Stool and bucket holder, combined milk. A. Woodward.....	271,292
Stove and range grate, adjustable, J. Brower.....	271,214
Stove, coal oil, J. W. Brower.....	271,215
Stove grate, D. Elsingher.....	271,229
Straw stacker, L. W. Berger et al.....	271,404
Structures with beton or concrete, repairing, J. C. Goodridge, Jr.....	271,234
Switch. See Railway switch.	
Switch lock, Driscoll & Dugan.....	271,435
Table. See Sewing machine table.	
Tag, E. W. Thompson.....	271,373
Teeth to artificial gums and flask for the same, securing, F. W. Seabury.....	271,370
Telegraph cable, submarine, Trott & Hamilton.....	271,548
Telegraph cable pipe, W. R. Patterson.....	271,262
Telephone exchanges, circuit for multiple switchboards for, C. E. Scribner.....	271,279
Telephone, mechanical, G. K. & H. C. Farrington.....	271,324
Telephone system and apparatus, C. A. Randall.....	271,513
Telephones, secrecy switch for, C. E. Scribner.....	271,280
Thrasher and separator, grain, J. Buchanan.....	271,310
Tilting gate, automatic, F. Kennedy.....	271,336
Tinners' machinery, N. G. Fair.....	271,440
Tool holder for grinding tools, J. R. Kennett.....	271,249
Tooth, artificial, C. H. Land.....	271,476
Top, musical, M. Dannborn.....	271,428
Tower and signal lantern, watch, C. S. Parkhill.....	271,261
Toy, W. E. Crandall.....	271,427
Toy, L. Schoenfeld.....	271,278
Toy catapult, Bower & Myers.....	271,568
Toy, mechanical, R. H. Ricker.....	271,273
Traction engine, E. Huber.....	271,464
Traction engine, P. H. Loud.....	271,343
Train-order signal, J. S. Trites.....	271,547
Trap. See Steam trap.	
Treadle for sewing machines, etc., H. Cramer.....	271,426
Tricycle, C. E. Heister.....	271,583
Truck for moving reapers, R. Chesnut.....	271,221
Tubes, device for making polygonal, A. D. McCarty.....	271,492
Tug attachment, hame, I. W. Numan.....	271,260
Valise, hand and saddle, W. G. Strubbe.....	271,54
Valve gear, steam engine, J. Frazier.....	271,577
Valve, oscillating engine, A. W. Harrison.....	271,449
Valve, stop, S. W. Martin.....	271,491
Vehicle reach, C. K. Robinson.....	271,530
Vehicle, two wheeled, W. T. Adel.....	271,294
Vehicle, two wheeled, H. F. Stahmer.....	271,532
Vehicle wheel, Z. Sprague.....	271,531
Velocipede, L. Schmetzer.....	271,524
Veneering or covering articles with pyroxyline, etc., apparatus for, J. A. McClelland.....	271,495
Veneering or covering articles with pyroxyline compound, etc., J. A. McClelland.....	271,494
Veneering or covering articles with pyroxyline or other plastic material, mould for, J. A. McClelland.....	271,496
Vent or vent bung, J. P. Gruber.....	271,236
Vise, D. Davis.....	271,316
Wagon running gear, T. B. Mackey.....	271,487
Wash tub support, J. Keid.....	271,516
Washer. See Composite washer.	
Washer, J. Ringen.....	271,275
Washer, S. H. Shively.....	271,373
Washing machine, A. K. De Good.....	271,317
Washing machine, J. B. Faucette.....	271,280
Washing machine, A. Scharnwider.....	271,369
Washing machine, C. N. White.....	271,355
Water closet, C. F. Pike.....	271,356
Water closet and other traps, cleansing, C. F. Pike.....	271,358
Water closet bowls and their traps, cleansing and disinfecting, C. F. Pike.....	271,357
Water closet splash board, W. Welch et al.....	271,557
Wheel. See Car wheel. Vehicle wheel.	
Whip connection, W. J. Morand.....	271,504
Whips, machine for rolling buttons on, W. J. Morand.....	271,503
Window shade roller, W. F. Edwards.....	271,433
Wood ornamenting, J. P. Jamison.....	271,469
Wrench. See Carriage wrench.	

## DESIGNS.

Card, C. A. Wright.....	13,567
Carpet, J. Nell.....	13,565
Carpet, P. Pignot.....	13,563
Carpet, T. J. Stearns.....	13,566
Chain, H. Untermyer.....	13,558
Harness bit, G. F. Eberhard.....	13,547
Harness bit, A. A. Pope.....	13,549
Harness bit, J. L. Pope.....	13,550
Harness bit, J. L. Pope.....	13,555
Harness trimming, F. Crane.....	13,561
Harness trimming, E. N. Crane.....	13,562
Harness trimming, C. F. Waldron.....	13,559
Mirror frame, G. L. Garrigues.....	13,564
Type, J. A. St. John.....	13,556
Type, font of printing, C. E. Heyer.....	13,557

## TRADE MARKS.

Beer, lager, J. Ruppert.....	10,004
Beer, lager, Williamsburgh Brewing Company.....	10,012
Biscuits, crackers, jumbles, snaps, cakes, wafers, and kindred articles, Hetfield & Ducker.....	9,986
Blues, laundry, Fickett & Beal.....	10,003
Boiler cleaning compound, T. Baker & Co.....	9,984
Books, letter-headings, envelopes, paper wrappers, advertising circulars, pamphlets, etc., F. A. Davis.....	9,998
Cod-liver oil, Ansar, Harford & Co.....	9,983
Flour, D. De Castro & Co.....	9,999
Glass table ware and fancy articles, F. S. Shirley.....	10,011
Implement, certain agricultural, Collins Company.....	10,006
Inks, lithographic, R. Mayer & Co.....	9,988
Lozenges, T. Keating.....	9,987
Paints and dyes, A. M. Meisner.....	10,009
Paper, wrapping, J. A. Dushane.....	9,985
Phenol, H. Clostre.....	9,996
Sleds and sleighs, B. F. & H. L. Sweet.....	9,992
Soap laundry and toilet, Schultz & Co.....	9,990
Stoves, ranges, and heaters generally, Michigan Stove Company.....	10,007
Tea, Catherwood & Co.....	9,994
Tea, E. A. Schoyer & Co.....	10,010
Tobacco, smoking, B. Leidersdorf & Co.....	10,003
Tobaccos, cigars, and cigarettes, fine-cut, plus chewing, and smoking, B. Leidersdorf & Co.....	10,005
Tools or implements for agricultural and mechanical purposes, H. W. Peabody & Co.....	9,989
Velveteen, Shaen & Christie.....	9,991
Whisky, J. Cotter.....	9,997
Wind and reed instruments, violins, and guitars, C. Bruno & Son.....	9,998
Wines, sparkling, Chandon & Co.....	9,995
Feast, compressed, Gaff, Fleischmann & Co., 10,000, 10,001	

## Advertisements.

Inside Page, each insertion - - - 75 cents a line.  
Back Page, each insertion - - - \$1.00 a line.  
(About eight words to a line.)  
Engravings may head advertisements at the same rate per line, by measurement, as the letter press. Advertisements must be received at publication office as early as Thursday morning to appear in next issue.

## FEED WATER HEATERS.

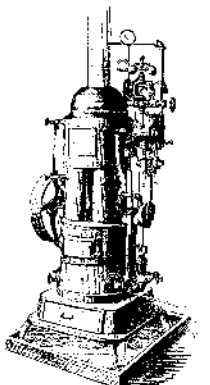
THE BEST AND CHEAPEST IN THE MARKET.  
Warranted to heat water by exhaust steam from 200° to 212° Fahrenheit.  
For description and price, apply to  
**THE NATIONAL PIPE BENDING CO.,**  
New Haven, Conn.



**Postal Coin Scale.**  
The standard letter and coin scale. Detects all counterfeit coins. A necessity to every business man. Sent prepaid on receipt of \$5. Agents wanted. Liberal terms.  
**W. F. JUNE & CO.,**  
237 Broadway, New York.

**BUSINESS.**—An old established Grain Cradle Business and Business Stand to lease. Nearly all the material for the present season on hand. For information, apply to  
**W. M. A. APGAR, Somerville, N. J.**

**FIRE BRICK** TILE AND CLAY RETORTS ALL SHAPES.  
**BORGNER & O'BRIEN**  
23 ST. ABOVE RACE, PHILADELPHIA.



## J. C. TODD, ENGINEER AND MACHINIST.

Flax, Hemp, Jute, Rope, Oakum, and Bagging Machinery. Steam Engines, Boilers, etc. Sole agent for Mayher's New Patent Acme Steam Engine and Force Pump combined. Also owner and exclusive manufacturer of

## The New Baxter Patent Portable Steam Engine.

These engines are admirably adapted to all kinds of light power for driving printing presses, pumping water, sawing wood, grinding coffee, ginning cotton, and all kinds of agricultural and mechanical purposes, and are furnished at the following low prices:

1 Horse Power, \$150.	1½ Horse Power, \$190.
2 Horse Power, 245.	2½ Horse Power, 275.
3 Horse Power, 290.	4 Horse Power, 350.

Send for descriptive circular. Address

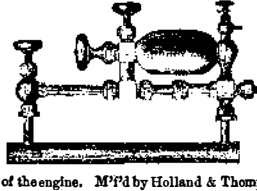
**J. C. TODD, Paterson, N. J.,**  
Or No. 10 Barclay St., New York.

## INTERNATIONAL Electric Exhibition, VIENNA, 1883.

The Commission of the International Electric Exhibition in Vienna, 1883, gives notice to the public that this Exhibition is to take place in the course of this year, to be opened on the 1st August and to be closed on the 31st October, and cordially invite Exhibitors and Visitors.  
The Regulations and the blanks necessary for Applications for space are to be had at the Austrian-Hungarian Consuls.  
The objects to be exposed will comprise all Machinery, Apparatus, and implements connected with Electric technique.  
It will certainly afford a good opportunity to inventors to show their latest improvements.  
This Exhibition is greatly favored by the Austrian Government, and will be held in the Rotunda of the well remembered Universal Exhibition of 1873.  
Exhibitors are requested to procure the necessary papers at once.

## THE HOLLAND LUBRICATOR, VISIBLE DROP.

Is guaranteed to be  
1. A perfect insurance against the cutting of Valve seats, Cylinder and Governor Valves of the engine.  
2. It will pay for itself in six months, in the saving of oil, coal, and packing.  
3. It will insure more speed in the revolutions of the engine, say from one to two strokes per minute, thus increasing the power of the engine.  
M.P.D. by Holland & Thompson, 217 River St., Troy, N. Y.



## "BLAKE'S CHALLENGE" ROCK BREAKER.

Patented November 18, 1879.

For Macadam Road making, Ballasting of Railroads, Crushing Ores, use of Iron Furnaces, etc. Rapidly superseding our older styles of Blake Crusher on account of its superior strength, efficiency, and simplicity. Adopted by important Railway and Mining Corporations, Cities, and Towns. First Class Medals of Superiority awarded by American Institute, 1879 and 1880.

**BLAKE CRUSHER CO., Sole Makers, New Haven, Conn.**

**PROSPECTING MINERAL LANDS A SPECIALTY.**  
CYLINDRICAL SECTIONS OR CORES OBTAINED THE WHOLE DISTANCE BORED. **ARTESIAN WELLS** BORED ROUND AND STRAIGHT ADMITTING A LARGER PUMP AND CASING IN PROPORTION TO SIZE OF HOLE THAN BY ANY OTHER PROCESS. ESTIMATES GIVEN AND CONTRACT MADE.  
**PENNSYLVANIA DIAMOND DRILL CO.**  
BOX 423 POTTSVILLE PA.  
MANUFACTURERS OF DIAMOND DRILLS FOR ALL KINDS OF ROCK BORING.



## NUT TAPPING MACHINE.

## DURRELL'S PATENT.

No. 1 Machine, 900 lb., 7 spindles.  
" 2 " 1,050 " 7 " 3 " 2 " 600 " 3 " 3 " 400 " 3 " 3 " 200 " 3 " 3 " 100 " 3 " 3 " 50 " 3 " 3 " 25 " 3 " 3 " 12 " 3 " 3 " 6 " 3 " 3 " 3 " 3 " 3 " 1 " 3 " 3 " 1/2 " 3 " 3 " 3/4 " 3 " 3 " 3/8 " 3 " 3 " 3/16 " 3 " 3 " 3/32 " 3 " 3 " 3/64 " 3 " 3 " 3/128 " 3 " 3 " 3/256 " 3 " 3 " 3/512 " 3 " 3 " 3/1024 " 3 " 3 " 3/2048 " 3 " 3 " 3/4096 " 3 " 3 " 3/8192 " 3 " 3 " 3/16384 " 3 " 3 " 3/32768 " 3 " 3 " 3/65536 " 3 " 3 " 3/131072 " 3 " 3 " 3/262144 " 3 " 3 " 3/524288 " 3 " 3 " 3/1048576 " 3 " 3 " 3/2097152 " 3 " 3 " 3/4194304 " 3 " 3 " 3/8388608 " 3 " 3 " 3/16777216 " 3 " 3 " 3/33554432 " 3 " 3 " 3/67108864 " 3 " 3 " 3/134217728 " 3 " 3 " 3/268435456 " 3 " 3 " 3/536870912 " 3 " 3 " 3/1073741824 " 3 " 3 " 3/2147483648 " 3 " 3 " 3/4294967296 " 3 " 3 " 3/8589934592 " 3 " 3 " 3/17179869184 " 3 " 3 " 3/34359738368 " 3 " 3 " 3/68719476736 " 3 " 3 " 3/137438953472 " 3 " 3 " 3/274877906944 " 3 " 3 " 3/549755813888 " 3 " 3 " 3/1099511627776 " 3 " 3 " 3/2199023255552 " 3 " 3 " 3/4398046511104 " 3 " 3 " 3/8796093022208 " 3 " 3 " 3/17592186044416 " 3 " 3 " 3/35184372088832 " 3 " 3 " 3/70368744177664 " 3 " 3 " 3/140737488355328 " 3 " 3 " 3/281474976710656 " 3 " 3 " 3/562949953421312 " 3 " 3 " 3/1125899906842624 " 3 " 3 " 3/2251799813685248 " 3 " 3 " 3/4503599627370496 " 3 " 3 " 3/9007199254740992 " 3 " 3 " 3/18014398509481984 " 3 " 3 " 3/36028797018963968 " 3 " 3 " 3/72057594037927936 " 3 " 3 " 3/144115188075855872 " 3 " 3 " 3/288230376151711744 " 3 " 3 " 3/576460752303423488 " 3 " 3 " 3/1152921504606846976 " 3 " 3 " 3/2305843009213693952 " 3 " 3 " 3/4611686018427387904 " 3 " 3 " 3/9223372036854775808 " 3 " 3 " 3/18446744073709551616 " 3 " 3 " 3/36893488147419103232 " 3 " 3 " 3/73786976294838206464 " 3 " 3 " 3/147573952589676412928 " 3 " 3 " 3/295147905179352825856 " 3 " 3 " 3/590295810358705651712 " 3 " 3 " 3/1180591620717411303424 " 3 " 3 " 3/2361183241434822606848 " 3 " 3 " 3/4722366482869645213696 " 3 " 3 " 3/9444732965739290427392 " 3 " 3 " 3/18889465931478580854784 " 3 " 3 " 3/37778931862957161709568 " 3 " 3 " 3/75557863725914323419136 " 3 " 3 " 3/151115727451828646838272 " 3 " 3 " 3/302231454903657293676544 " 3 " 3 " 3/604462909807314587353088 " 3 " 3 " 3/1208925819614629174706176 " 3 " 3 " 3/2417851639229258349412352 " 3 " 3 " 3/4835703278458516698824704 " 3 " 3 " 3/9671406556917033397649408 " 3 " 3 " 3/19342813113834066795298816 " 3 " 3 " 3/38685626227668133590597632 " 3 " 3 " 3/77371252455336267181195264 " 3 " 3 " 3/154742504910672534362390528 " 3 " 3 " 3/309485009821345068724781056 " 3 " 3 " 3/618970019642690137449562112 " 3 " 3 " 3/1237940039285380274899244224 " 3 " 3 " 3/2475880078570760549798488448 " 3 " 3 " 3/4951760157141521099596976896 " 3 " 3 " 3/9903520314283042199193953792 " 3 " 3 " 3/19807040628566084398387907584 " 3 " 3 " 3/39614081257132168796775815168 " 3 " 3 " 3/79228162514264337593551630336 " 3 " 3 " 3/158456325028528675187103260672 " 3 " 3 " 3/316912650057057350374206521344 " 3 " 3 " 3/633825300114114700748413042688 " 3 " 3 " 3/1267650600228229401496826085376 " 3 " 3 " 3/2535301200456458802993652170752 " 3 " 3 " 3/5070602400912917605987304341504 " 3 " 3 " 3/10141204801825835211974608683008 " 3 " 3 " 3/20282409603651670423949217366016 " 3 " 3 " 3/40564819207303340847898434732032 " 3 " 3 " 3/81129638414606681695796869464064 " 3 " 3 " 3/162259276829213363391593738928128 " 3 " 3 " 3/324518553658426726783187477856256 " 3 " 3 " 3/649037107316853453566374955712512 " 3 " 3 " 3/1298074214633706907132749911425224 " 3 " 3 " 3/2596148429267413814265499822850448 " 3 " 3 " 3/5192296858534827628530999645700896 " 3 " 3 " 3/1038459371706965525706199929140192 " 3 " 3 " 3/2076918743413931051412399858280384 " 3 " 3 " 3/4153837486827862102824799716560768 " 3 " 3 " 3/8307674973655724205649599433121536 " 3 " 3 " 3/1661534994731144841129919886623072 " 3 " 3 " 3/3323069989462289682259839773246144 " 3 " 3 " 3/6646139978924579364519679546492288 " 3 " 3 " 3/13292279957849158729039359092945728 " 3 " 3 " 3/26584559915698317458078718185891456 " 3 " 3 " 3/53169119831396634916157436371782912 " 3 " 3 " 3/106338239662793269832314872743565824 " 3 " 3 " 3/212676479325586539664629745487131648 " 3 " 3 " 3/425352958651173079329259490974263296 " 3 " 3 " 3/850705917302346158658518981948526592 " 3 " 3 " 3/1701411834604692317317037963897053184 " 3 " 3 " 3/3402823669209384634634075927794106368 " 3 " 3 " 3/6805647338418769269268151855588212736 " 3 " 3 " 3/13611294676837538538536303711176425472 " 3 " 3 " 3/27222589353675077077072607422352850944 " 3 " 3 " 3/54445178707350154154145214844705701888 " 3 " 3 " 3/108890357414700308308290429689411403776 " 3 " 3 " 3/217780714829400616616580859378822807552 " 3 " 3 " 3/435561429658801233233161718757645615104 " 3 " 3 " 3/871122859317602466466323437515291230208 " 3 " 3 " 3/1742245718635204932932646875030582460416 " 3 " 3 " 3/34844914372704098658652937500611648120832 " 3 " 3 " 3/69689828745408197317305875001223296241664 " 3 " 3 " 3/139379657490816394634611750002446582483328 " 3 " 3 " 3/27875931498163278926922350000489316566656 " 3 " 3 " 3/55751862996326557853844700000978633133312 " 3 " 3 " 3/111503725992653115707689400001957266266624 " 3 " 3 " 3/22300745198530623141537880000391453253248 " 3 " 3 " 3/44601490397061246283075760000782906506496 " 3 " 3 " 3/89202980794122492566151520001565813012992 " 3 " 3 " 3/178405961588244985132303040003131626025984 " 3 " 3 " 3/356811923176489970264606080006263252051968 " 3 " 3 " 3/713623846352979940529212160012526504103936 " 3 " 3 " 3/1427247692705959881058424320025053008207872 " 3 " 3 " 3/2854495385411919762116848640050106016415744 " 3 " 3 " 3/5708990770823839524233697280100212032831488 " 3 " 3 " 3/11417981541647679048467394560200424065662976 " 3 " 3 " 3/22835963083295358096934789120400848131325952 " 3 " 3 " 3/45671926166590716193869578240801696262651904 " 3 " 3 " 3/91343852333181432387739156481603392525303808 " 3 " 3 " 3/182687704666362864775478312963206785050607616 " 3 " 3 " 3/365375409332725729550956625926413570101215232 " 3 " 3 " 3/730750818665451459101913251852827140202430464 " 3 " 3 " 3/1461501637330902918203826503705654280404860928 " 3 " 3 " 3/2923003274661805836407653007411308560809721792 " 3 " 3 " 3/5846006549323611672815306014822617121619443584 " 3 " 3 " 3/11692013098647223345630612029645234243238887168 " 3 " 3 " 3/2338402619729444669126122405929046848647777536 " 3 " 3 " 3/4676805239458889338252244811858093697295555072 " 3 " 3 " 3/935